



# NASA HISTORY NEWS AND NOTES

Vol. 12, No. 2

Spring 1995

## IN THIS ISSUE

- NASA History Listserv Established
- NASA History Office Assigned to Policy and Biography of James E. Webb Published
- Noordung Translations Available from GPO
- NASA Pocket Statistics Issued
- President's Report Now Available
- Satellite Communications Symposium
- NASA History on the Internet
- History Office Support of Apollo 13
- Space Center Houston Snoopy Exhibit
- Resources for Scholars
- Call for Aeronautical R&D History Papers
- In Memorium: T. Keith Glennan
- Calls for Papers
- Fellowship and Grant Opportunities
- Upcoming Meetings
- Recent Books

## NASA HISTORY LISTSERV ESTABLISHED

Now, if you have e-mail capability, you can subscribe to *NASA History: News and Notes* via a standard listserv. This will eliminate the lengthy header of addresses that has been clogging up your mailbox. To subscribe send a message to [domo@hq.nasa.gov](mailto:domo@hq.nasa.gov). Leave the subject line blank. In the text portion type "subscribe history" without the quotation marks. Type only that, leave out your name unlike many other listserv programs, and you will receive confirmation that your account has been added to the list. The NASA History List will be a relatively low volume listserv; we intend to use it to send out the newsletter and to make other announcements as appropriate. It will not be a true discussion list, although if you would like to see one created, or if you have difficulties or questions please call or send a message to Roger D. Launius, NASA Chief Historian, Code ZH, NASA Headquarters, Washington, DC 20546; 202-358-0384, Fax 202-358-2866, e-mail: [rlaunius@codei.hq.nasa.gov](mailto:rlaunius@codei.hq.nasa.gov).

## NASA HISTORY OFFICE ASSIGNED TO POLICY AND PLANS ORGANIZATION

### Plans Organization

In early May 1995 the NASA History Office was reassigned from the Office of External Relations, Code I, to the Office of Policy and Plans, Code Z. This is quite a positive change as External Relations is oriented toward handling NASA corporate relations with international partners, and the History Program can now make an even greater impact on policy and plans in the new Code Z structure. There are no major changes projected in our method of operation. Our mail code, which had been Code ICH, will now change to Code ZH, and at a later but as yet unspecified time our e-mail addresses will change, but beyond this we will continue to function as at present. We will keep you apprised of developments as they happen.

## BIOGRAPHY OF JAMES E. WEBB PUBLISHED

The Johns Hopkins University Press has just released in the "New Series in NASA History," *Powering Apollo: James E. Webb of NASA*. Written by W. Henry Lambright, The Maxwell School of Citizenship and Public Affairs and Director of the Center for Environmental Policy and Administration at Syracuse University, Syracuse, New York, this book is an administrative biography of the NASA Administrator who guided the agency during most of the 1960s. It casts light on the management of complex organizations involved in high technology research and development by focusing on the career and experiences of the central figure in what arguably is the most significant technological endeavor in history.

The book is available for \$35.95 from The Johns Hopkins University Press, Hampden Station, Baltimore, MD, 21211, telephone 800-537-5487.

## NOORDUNG TRANSLATION AVAILABLE FROM GPO

The History Office has just released in its NASA History Series *The Problem of Space Travel: The*

*Rocket Motor* (Washington, DC: NASA SP-4026, 1995), pp. xxvii, 149; 100 illustrations. Edited by Ernst Stuhlinger and J.D. Hunley with Jennifer Garland. Foreword by Frederick I. Ordway III.

This is the first fully-edited, complete English translation of Hermann Noordung's 1929 classic book *Das Problem der Befahrung des Weltraums*. Ernst Stuhlinger, who earned his Ph.D. in physics at the University of Tübingen in 1936 and whose involvement in rocketry began at Peenemünde in 1943 and extended through service as associate director of science at NASA's Marshall Space Flight Center, and J.D. Hunley of the NASA History Office have edited a 1993 NASA translation initially edited by Jennifer Garland. This publication includes copies of the original color plates from the 1929 book, which dealt, as its title suggests, with a broad range of topics relating to space travel.

This book is important in the early literature about space travel because of its extensive treatment of the engineering details of a space station. Although there had been earlier discussions of this subject, none of them provided the technical detail Noordung included in his book. A foreword and a preface to the translation relate what is known about Noordung, and provide historical context about the book and its importance.

NASA History Series books may be obtained from the NASA Information Center, Code JOB-19, NASA Headquarters, Washington, DC 20546, telephone 202-358-0000. Order SP-4026. The cost is \$11.00. All orders should be prepaid.

#### ***NASA POCKET STATISTICS ISSUED***

The NASA History Office has also just released the 1995 edition of the *NASA Pocket Statistics*. This booklet is periodically issued as a ready reference source containing information about the agency's administration and organization; space flight activity; and procurement, funding, and manpower. As an annual publication, it presents information about NASA as of the end of the fiscal year of 1994.

For the first time ever, the booklet is available for public sale. Copies can be obtained from the Superintendent of Documents of the Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954. Credit card orders can be made by calling 202-512-1800 or sending a Fax to 202-512-2250. When ordering please use the order number 033-000-01150-4. The cost of this booklet is \$4.25 (\$5.31 foreign) postpaid.

#### ***PRESIDENT'S REPORT NOW AVAILABLE***

The *Aeronautics and Space Report of the President, Fiscal Year 1994 Activities* has just gone to the printer and should be sent to Federal Depository Libraries and those on the distribution list in about a month. For those of you who may not be familiar with the report, it includes an executive summary and about 50 pages of narrative discussing aeronautics and space activities of 15 agencies in the federal government during the fiscal year.

Supplementing the narrative are 50 more pages of appendices, a glossary of terms and acronyms, and an index. The appendices range from data and descriptions of satellites and space launches to budgetary data and key space policy documents. Each year the NASA History Office, assisted by numerous individuals from NASA and the other involved agencies, prepares this report for the White House.

Limited numbers of copies of the *President's Report* are available for those who would like one. They are free of charge to those who wish to pick them up at the NASA History Office in Washington. Selected back issues are also available on the same basis.

Copies are also available free of charge by mail, but we request that individuals provide postage. To obtain one by mail please send a self-addressed 9"x12" mailing envelope with \$3.00 in U.S. postage together with your request to the NASA History Office, Code ZH, NASA Headquarters, Washington, DC 20546.

For those who do not need a personal copy but would like to consult this and previous reports, they are located in the government documents sections of Federal Depository Libraries throughout the United States. If you have any questions about this please contact the NASA History Office at 202-358-0384.

#### ***SYMPOSIUM ON THE DEVELOPMENT OF SATELLITE COMMUNICATIONS TO BE HELD***

The NASA History Office will be co-sponsoring with the IEEE History Center a symposium entitled "Beyond the Ionosphere: The Development of Satellite Communications," at the NASA Headquarters Auditorium on 17-18 October 1995, in Washington, D.C.

This year, 1995, marks the fiftieth anniversary of Arthur's C. Clarke's article in *Wireless World* in which he proposed the use of satellites placed in geosynchronous orbit for communications relay sites. It also marks the thirtieth anniversary of the launch of *Early Bird*, COMSAT's first satellite, effectively beginning global satellite communications. These are important events deserving recognition in this historical symposium.

Additionally, the discoveries of Karl Jansky and Grote Reber, often cited as the starting point of radio astronomy, launched the modern era of telecommunications. In the past, the ionosphere defined the limits of radio communication; today, by going beyond the ionosphere, broadband telecommunication has entered a new age. This conference will deal with the first attempts to go beyond the ionosphere, including both the earliest uses of the Moon as a passive, natural relay satellite and Project Echo, as well as contemporary communications via man-made moons in geostationary orbit about the Earth. It will deal with both American and foreign satellite communications, histories of satellite communications companies, the roles of government agencies, and the contribution of research laboratories.

Historians and sociologists of science and technology, economists, political scientists, and public policy scholars are invited to attend, as well as scientists, engineers, technicians, and managers in the field of satellite telecommunications. One of the key objectives of the conference is to bring scholars and practitioners together. Another chief objective is to stimulate scholarly interest in satellite communication. In order to reach as wide an audience as possible, NASA plans to publish the proceedings of the conference.

As currently conceived, the conference will comprise four sessions followed by a tour of the COMSAT research and development laboratories in nearby Clarksburg, Maryland, on Thursday, 19 October. Dr. John V. Evans, who witnessed the beginnings of lunar-relay communications at Jodrell Bank in England, and the current President of COMSAT laboratories, will conduct the tour.

The conference immediately precedes the meeting of the Society for the History of Technology in Charlottesville, Virginia. Those attending the NASA conference may wish to attend the nearby SHOT meeting as well. Further information can be obtained by contacting Roger D. Launius at the NASA History Office, Code ZH, NASA Headquarters, Washington, DC 20546; telephone 202-358-0384; Fax 202-358-2866; e-mail [rilaunius@codei.hq.nasa.gov](mailto:rilaunius@codei.hq.nasa.gov); or Andrew Butrica at the same address; telephone 908-422-7078; e-mail [a.butrica@ieee.org](mailto:a.butrica@ieee.org).

### **NASA HISTORY ON THE INTERNET**

The NASA History Office continues to develop a presence on the World Wide Web. We have a Project Apollo exhibit available on the Internet at: [http://www.gsfc.nasa.gov/hqpao/apollo\\_11.html](http://www.gsfc.nasa.gov/hqpao/apollo_11.html). The main history homepage—<http://www.gsfc.nasa.gov/hqpao/history.html>—is growing rapidly.

We have placed on-line the biographies of all NASA Administrators and Deputy Administrators, reference sets of the tenure of all NASA Center Directors, and thumbnail biographies of key people involved in the early history of spaceflight. We have also placed on line a series of key space policy documents, under the "Astronautics" button of the NASA History Homepage, and we are working to place the NASA History Series on-line. We will be adding additional historical documents to the World Wide Web as soon as they can be placed in the proper hypertext format. Stay tuned for more information.

### **HISTORY OFFICE SUPPORT OF APOLLO 13 BOOK AND MOVIE**

The NASA History Office has been involved in the development of what promises to be a summer blockbuster, the Ron Howard/Tom Hanks movie, *Apollo 13*. Astronaut Jim Lovell, Commander, Apollo 13, first contacted the NASA History Office's archivist Lee D. Saegesser in December 1992 with several reference requests in conjunction with his memoirs and both Lovell and his co-author, Jeff Kluger, used our extensive collection of Apollo 13 interviews, flight transcripts, and assorted materials in February 1993. When *Lost Moon: The Perilous Voyage of Apollo 13* appeared in local bookstores in mid-1994, we were delighted.

Later in the year, we learned that the film rights to the book had been sold and Lee Saegesser began to be inundated with requests for information concerning the Apollo Command Module, Lunar Module, and the Saturn V by the company handling special effects for the film. We also became involved in providing technical information to several other people and companies working on various aspects of the film's production. For instance, we provided reference material to a company developing and marketing a CD-ROM containing complete information about the Apollo 13 flight, accident, and investigation. We continue to provide large amounts of data to media, the public, and others about the flight of Apollo 13 in conjunction with the movie release.

In anticipation of the film's release the NASA History Office has developed a short synopsis of "The Flight of Apollo 13." Copies of this are available free of charge as long as they last. Contact Roger D. Launius, NASA Chief Historian, Code ZH, NASA Headquarters, Washington, DC 20546; telephone 202-358-0384, Fax 202-358-2866, e-mail: [rilaunius@codei.hq.nasa.gov](mailto:rilaunius@codei.hq.nasa.gov).

### **SPACE CENTER HOUSTON SNOOPY EXHIBIT AND A SNOOPY ARCHIVES**

## AERONAUTICAL R&D HISTORY PAPERS REQUESTED

In late March 1995 NASA Archivist Lee Saegesser spoke with Bob Lindell of ArtServe acting as the "collecting agent" for a proposed exhibit on Snoopy and the Space Program to be shown at the Houston Space Center, 1 July through 17 September 1995. He asked what material the NASA Historical Reference Collection contained pertaining to Charles Schulz, Snoopy, Peanuts, and the Space Flight Awareness Program. In April Lindell visited the office and copied many pertinent items, including several "Manned Flight Awareness" notebooks accessioned into the collection many years ago that contain Snoopy logos, artwork, and the like. Additionally Lee Saegesser has loaned many philatelic items, newspaper clippings, and decals to be included in the Space Center Houston exhibit. When next visiting the Johnson Space Center please check out the exhibit.

Coincidentally, the History Office was contacted by individuals involved in the development of the Charles Schulz Archives currently being established in California. We have, therefore, provided that organization with copies of numerous reference materials for use in its efforts.

### RESOURCES FOR SCHOLARS: ARCHIVES OF AMERICAN AEROSPACE EXPLORATION

For historians of air and space, an important set of primary source materials is being collected in the Archives of American Aerospace Exploration (AAAE) at the Virginia Polytechnic Institute. This archives has been created around the gift of the papers of Christopher C. Kraft, Jr., former director of the Johnson Space Center, to the Special Collections Department of the University Libraries at his alma mater Virginia Tech. Since that time the archives have added the papers of astronaut Michael Collins, command module pilot for *Apollo 11*, the first lunar landing mission; Samuel Herrick, a pioneering astrodynamacist; John T. Parsons, the creator of numeric control, or the application of computer technology to manufacturing; Robert R. Gilruth, former director of NASA's Space Task Group, created in 1958 to develop Project Mercury; and Evert B. Clark, former aerospace journalist for *Newsweek* and the *New York Times*. The homepage is <http://scholar2.lib.vt.edu/spec/aerosp/aerohp.htm>. For further information about the AAAE, please contact: Eric Ackermann, [eackerma@vt.edu](mailto:eackerma@vt.edu); 703-231-6308 or 9206, Fax 703-231-9263, at Special Collections, University Libraries, Virginia Tech, PO Box 90001, Blacksburg, VA 24062-9001.

Original essays on the history of aviation are wanted for a projected book in the NASA History Series on the development of aeronautical technology in the United States. The collected work will consist of case studies in aeronautical research and development. For further information contact Dr. Roger D. Launius, NASA History Office, Code ZH, NASA Headquarters, Washington, DC 20546; telephone 202-358-0384; Fax 202-358-2866; e-mail: [rlaunius@codei.hq.nasa.gov](mailto:rlaunius@codei.hq.nasa.gov).

### IN MEMORIUM: T. KEITH GLENNAN

The NASA History Program recently lost a long-standing friend. T. Keith Glennan, the first Administrator of NASA who served between 1958 and 1961, passed away in Mitchellville, Maryland, on 11 April 1995, after a stroke. He was 89.

Dr. Glennan established the NASA History Program in 1959, not long after taking the helm of the agency, and hired its first chief historian, Dr. Eugene M. Emme. Since that time Dr. Glennan remained strongly supportive of an honest, aggressive history documentation effort both for the use of internal NASA leaders who could benefit from the perspective of the past in their daily activities as well as for the benefit of the nation as a whole. Not long before his death we had the privilege of working with Dr. Glennan to publish *The Birth of NASA: The Diary of T. Keith Glennan*, edited by J.D. Hunley (Washington, DC: Government Printing Office, NASA SP-4105, 1993), which records his experiences as NASA administrator.

While at NASA, Dr. Glennan was president-on-leave of the Case Institute of Technology, Cleveland, Ohio, which he had headed since 1947 and returned to following his NASA experience.

Born in Enderlin, North Dakota, on September 8, 1905, Dr. Glennan earned a degree in electrical engineering from the Sheffield Scientific School of Yale University in 1927. Following graduation, he became associated with the newly developed sound motion picture industry, and later became assistant general service superintendent for Electrical Research Products Company, a subsidiary of Western Electric Company. During his career he was studio manager of Paramount Pictures, Inc., and Samuel Goldwyn Studios, and was briefly on the staff of Vega Airplane Corporation.

Dr. Glennan joined the Columbia University Division of War Research in 1942, serving throughout World War II, first as Administrator and then as Director of the U.S. Navy's Underwater Sound Laboratories at New London, Connecticut.

At the end of the war, Dr. Glennan became an executive of the AnSCO Corp., Binghamton, New York. From this position he was called to the presidency of Case. During his administration, Case rose from a primarily local institution to rank with the top engineering schools in the nation. From October 1950 to November 1952, concurrent with his Case presidency, he served as a member of the Atomic Energy Commission.

Dr. Glennan was also very active in national and civic affairs. He was chairman of the board of the Institute for Defense Analysis, on the board of the National Science Foundation, and the Council on Financial Aid to Education. In Cleveland he took an important part in many civic activities.

As NASA administrator, Dr. Glennan presided over an organization that had absorbed the earlier National Advisory Committee for Aeronautics intact; its 8,000 employees, an annual budget of \$100 million, and three major research laboratories—Langley Aeronautical Laboratory, Ames Aeronautical Laboratory, and Lewis Flight Propulsion Laboratory—and two small test facilities made up the core of the new NASA.

Within a short time after NASA's formal organization, Glennan incorporated into NASA several organizations involved in space exploration projects from other federal agencies to ensure that a viable scientific program of space exploration could reasonably be conducted over the long-term. He brought part of the Naval Research Laboratory into NASA and created for its use the Goddard Space Flight Center, Greenbelt, Maryland. He also incorporated several disparate satellite programs, two lunar probes, and the important research effort to develop a million-pound-thrust, single-chamber rocket engine from the Air Force and the Department of Defense's Advanced Research Projects Agency. In December 1958 Glennan also acquired control of the Jet Propulsion Laboratory, a contractor facility operated by the California Institute of Technology (Caltech) in Pasadena, California. In 1960 Dr. Glennan obtained the transfer to NASA of the development operations division within the Army Ballistic Missile Agency (ABMA), located at Huntsville, Alabama, and renamed it the Marshall Space Flight Center.

By mid-1960 Glennan had secured for NASA primacy in the Federal Government for the execution of all space activities except reconnaissance satellites, ballistic missiles, and a few other space-related projects, most of which were still in the study stage, that the DOD controlled.

Upon leaving NASA in January 1961, Dr. Glennan returned to the Case Institute of Technology, where he was continued to serve as president until

1966. During this period he helped to negotiate the merger of Case with Western Reserve University, creating Case Western Reserve University. Upon his retirement in 1966, Dr. Glennan spent two years as president of Associated Universities, Inc., a Washington-based advocate for institutions of higher learning.

#### **CALLS FOR PAPERS OF INTEREST TO AEROSPACE HISTORIANS**

The Australian National University, Canberra, Australia, is sponsoring a symposium entitled "Science, Politics and Evolution in Asia and the Pacific" on 20-21 November 1995. This workshop will explore how evolutionism and other scientific models have been translated into various social and political discourses articulated in the Asia-Pacific region. The impact on different cultures and value systems will be one sub-theme, as will be the manner in which Darwinian themes were co-opted to serve various interest groups. Proposals of papers are invited. Deadline for submission is 31 July 1995. Contact Dr. Christine Dureau (telephone 06 249 4247) and Dr. Morris Low (telephone 06 249 3121), Division of Pacific and Asian History, Research School of Pacific and Asian Studies, ANU, Canberra, ACT 0200, Australia; Fax (06) 249 5525; e-mail dureau or mlow@coombs.anu.edu.au.

The American Astronautical Association will be holding its annual meeting at Marina Del Rey, CA, on 4-6 December 1995. The AAS History Committee is planning to organize a session on the development of solid rocketry. Anyone wishing to present a paper on this subject should contact, Dr. Donald C. Elder, History Department, University of Redlands, 1200 E. Colton Avenue, Redlands, CA 92373.

The Business History Conference has issued a call for papers for its meeting of 15-17 March 1996 to be held in Columbus, OH. Paper and session proposals should be sent by 1 October 1995 to Mansel Blackford, Department of History, The Ohio State University, 230 West 17th Avenue, Columbus, OH 43210; telephone 614-292-6341; Fax 614-292-2282; e-mail blackford.1@osu.edu.

The National Council on Public History will be holding its annual meeting in Seattle, WA, on 10-13 April 1996. The theme, "History and the Public Interest," should interest aerospace historians. To propose send by 1 July 1995 a short abstract and vita to Robert M. Weible, Division of History, Pennsylvania Historical and Museum Commission, Box 1026, Harrisburg, PA 17108-1026, 717-783-9867; Fax 717-783-1073.

The Society for Military History has issued a call for papers for its annual meeting in Washington, DC, on 18-21 April 1996. Contact Dr. Kevin C. Ruffner, SMH 1996 Program Coordinator, History Staff, Central Intelligence Agency, Washington, DC 20505, telephone 703-351-2621, Fax 703-522-9280. Deadline for proposals is 1 November 1995.

The Southwest Historical Association will meet in conjunction with the Southwestern Social Science Association in Houston, TX, 20-23 March 1996. Proposals for papers or sessions Pedro Santoni, Department of History, California State University-San Bernardino, 5500 University Parkway, San Bernardino, CA 92407-2397; telephone 909-880-5530; e-mail PSantoni@wiley.csusb.edu. The deadline for proposals is 1 October 1995.

The International Symposium on Technology and Society 1996 (ISTAS'96) has issued a call for papers for its 21-22 June 1996 meeting at Princeton University, Princeton, NJ. The theme of the symposium is "Technical Expertise and Public Decisions." Proposals should consist of a one page abstract of a paper or poster, or a proposal for a paper session or panel discussion. Deadline for proposing is 15 December 1995. Contact Professor Clinton J. Andrews, ISTAS'96 Chair, Program in Science, Technology, and Public Policy, Woodrow Wilson School, Princeton University, Princeton, NJ 08544-1013, e-mail: istas@www.princeton.edu, Fax: 609-258-1985

The Third British-North American Joint Meeting of the Canadian Society for History and Philosophy of Science, the History of Science Society, and the British Society for History of Science has issued a call for papers for its annual meeting in Edinburgh, Scotland on 23-26 July 1996. Contact program representatives from the respective societies, HSS—Bob Hatch, Department of History, University of Florida, Gainesville, FL 32611, voice 904-392-0271; e-mail ufhatch@nervm.nerdc.ufl.edu; CSHPS—Hannah Gay, Department of History, Simon Fraser University, Burnaby, B.C. V5A 1S6 Canada, telephone 604-291-3648; Fax 604-291-5387; e-mail hgay@sfu.ca; BSHS—Stephen Pumfrey, Department of History, Lancaster University, Lancaster LA1 4YG, ENGLAND; telephone 0524-592508; Fax 0524-846102; e-mail hia004@lancaster.ac.uk.

The Western History Association has issued a call for papers for its annual meeting on 9-12 October 1996 in Lincoln, NE. Proposals should be sent by 1 September 1995 to John Mack Faragher, Department of History, Yale University, New Haven, CT 06520-7425, telephone 203-432-0727, Fax 203-432-7587.

## **FELLOWSHIP AND GRANT**

## **OPPORTUNITIES**

The Air Force Historical Research Agency announces research grants up to \$2,500 to encourage scholars to study the history of air power at its collections at Maxwell Air Force Base, Alabama. Applications can be obtained from the Commander, Air Force Historical Research Agency, 600 Chennault Circle, Maxwell AFB, AL 36112-6424. The deadline is 1 October 1995.

The Rockefeller Archive Center invites applications for its program of Grants for Travel and Research at the Center. The competitive program is aimed at graduate students and postdoctoral scholars who are engaged in research that requires use of the Center's collections. The deadline is 30 November 1995. Contact: Darwin H. Stapleton, Director, Rockefeller Archive Center, 15 Dayton Ave., North Tarrytown, NY 10591-1598.

The Fulbright Scholar Program has issued a call for proposals for grants for faculty and professionals. The deadline for proposing is 1 August 1995. Opportunities exist in every area of the social sciences, arts and humanities, sciences, and many professional fields. All specializations within U.S. and non-U.S. history are included in program offerings. U.S. candidates may receive detailed descriptions of award opportunities and application materials via [cies1@ciesnet.cies.org](mailto:cies1@ciesnet.cies.org).

The Newberry Library invites applications for short-term residential fellowships in the humanities for 1995-1996. The application deadline for fellowships for the first half of 1996 is 15 October 1995. Contact the Awards Committee, Newberry Library, 60 W. Walton St., Chicago, IL 60610, call 312-255-3666.

Located in the heart of Washington, D.C., the Woodrow Wilson Center awards approximately 35 residential fellowships each year for advanced research in the humanities and social sciences. Men and women from any country and from a wide variety of backgrounds (including government, the corporate world, the professions, and academe) may apply. Applicants must hold a doctorate or have equivalent professional accomplishments. Fellows are provided offices, access to the Library of Congress, computers or manuscript typing services, and research assistants. The Center publishes selected works written at the Center through the Woodrow Wilson Center Press. Fellowships are normally for an academic year. In determining stipends, the Center follows the principle of no gain/no loss in terms of a Fellow's previous year's salary. The application deadline is 1 October 1995. For application materials write to: Fellowships Office, Woodrow Wilson Center, 1000 Jefferson Drive SW, SI

MRC 022, Washington, DC 20560; telephone, 202-357-2841.

### UPCOMING MEETINGS

An International Symposium on Telecommunications History will be held on 21-22 June 1995 in Wilmington, DE. For information Russell A. Pizer, General Chair, Third International Symposium on Telecom History, 305 Cooper Road, North Babylon, New York, NY 11703-4430, Fax 516-422-2324.

The Society for Historians of American Foreign Relations (SHAFR) will hold its annual meeting at the U.S. Naval Academy at Annapolis, MD, on 21-24 June 1995. Contact Robert D. Schulzinger, SHAFR Program Committee, History Department, CB 234, University of Colorado, Boulder, CO 80309.

The Second Biennial History of Astronomy Workshop will be held at the University of Notre Dame on 22-25 June 1995. Contact Michael J. Crowe, Program of Liberal Studies, University of Notre Dame, Notre Dame, IN 46556; telephone 219-272-3426; e-mail Michael.J.Crowe.1@nd.edu.

The Australasian Association for the History, Philosophy and Social Studies of Science will hold its annual meeting at the University of New South Wales, Sydney, Australia, on 8-11 July 1995. For information contact David Miller, School of Science and Technology Studies, University of New South Wales, Sydney 2052, Australia; telephone +61 2 385 2359; Fax +61 2 313 7984; e-mail DP.Miller@unsw.EDU.AU.

The Center for the History of Electrical Engineering will be sponsoring a conference for scholars and others interested in the history of electrical engineering to meet and discuss issues related to the discipline. The meeting will take place at Williams College in the Berkshire Mountains of northwestern Massachusetts. Anyone interested in attending should contact the Center for the History of Electrical Engineering, Rutgers University, 39 Union Street, New Brunswick, NJ 08903, telephone 908-932-1066; e-mail history@ieee.org.

The International Congress of International Sciences will be held in Montreal on 27 August-3 September 1995. Registration information is available on the Universite du Quebec a Montreal Gopher <gopher.uqam.ca>. Select "Calendrier des evenements a l'UQAM," then "Congres et colloques", then "CISH 1995/ICHS 1995." Contact the Congress Organizing Committee at <cish95@uqam.ca>.

Three sessions on spaceflight history will be held at the 46th International Astronautical Federation meeting in Oslo, Norway, 2-6 October 1995. For

information contact Frederick I. Ordway III, 2401 N. Taylor St., Arlington, VA 2207; Fax 703-524-3856.

A conference, "Boundaries and Bridges: Interdisciplinary Perspectives Among Science, Technology, and the Humanities," sponsored by the Social and International Studies Department at the Southern College of Technology and the Humanities and Technology Association, will be held in Atlanta, GA, on 19-20 October 1995. For information contact Julie R. Newell, Director, Department of Social and International Studies, Southern College of Technology, 1100 South Marietta Parkway, Marietta, GA 30060-2896.

A joint meeting of the Society for the History of Technology and the Society for the Social Studies of Science (4S) will be held in Charlottesville, VA, on 19-22 October 1995. Contact Dr. Bruce E. Seely, SHOT Executive Director, Department of Social Sciences, Michigan Technological University, Houghton, MI 44931-1295.

The Oral History Association will hold its annual meeting at Milwaukee, WI, on 19-22 October 1995. Contact Michael A. Gordon, Department of History, University of Wisconsin-Milwaukee, Box 413, Milwaukee, WI 53201.

The annual meeting of the American Studies Association will take place in Pittsburgh, PA, on 9-12 November 1995. The theme of the meeting is "Toward a Common Ground." Contact the American Studies Association, 1120 19th Street, NW, Suite #301, Washington, DC 20036.

The annual meeting of the American Historical Association will take place in Atlanta, GA, on 4-7 January 1996. For information contact the AHA, 400 A. Street, S.E., Washington, DC 20003.

The annual meeting of the Organization of American Historians will take place in Chicago, IL, on 28-31 March 1996. For information contact the OAH at 112 North Bryan St., Bloomington, IN 47408-4199.

### BOOKS OF INTEREST TO AEROSPACE HISTORIANS

The following is a list of the publications of the European Space Agency History Program. These are available for purchase from the ESA Publications Division, ESTEC, Noordwijk, The Netherlands. Each publication costs a bit, but not too much—ESTEC can provide details.

Krige, John. *The Prehistory of ESRO 1959/60*. The Netherlands: ESA Publications Division, ESA HSR-1, July 1992.

Russo, Arturo. *ESRO's First Scientific Satellite Programme 1961-1966*. The Netherlands: ESA Publications Division, ESA HSR-2, October 1992.

Russo, Arturo. *Choosing ESRO's First Scientific Satellites*. The Netherlands: ESA Publications Division, ESA HSR-3, November 1992.

Krige, John. *The Early Activities of the COPERS and the Drafting of the ESRO Convention (1961/62)*. The Netherlands: ESA Publications Division, ESA HSR-4, January 1993.

De Maria, Michelangelo. *Europe in Space: Edoardo Amaldi and the Inception of ESRO*. The Netherlands: ESA Publications Division, ESA HSR-5, March 1993.

Russo, Arturo. *The Definition of a Scientific Policy: ESRO's Satellite Programme in 1969-1973*. The Netherlands: ESA Publications Division, ESA HSR-6, March 1993.

Krige, John. *The launch of ELDO*. The Netherlands: ESA Publications Division, ESA HSR-7, March 1993.

Krige, John. *Europe into Space: The Auger Years (1959-1967)*. The Netherlands: ESA Publications Division, ESA HSR-8, May 1993.

Russo, Arturo. *The Early Development of Telecommunications Satellite Programme in ESRO (1965-1971)*. The Netherlands: ESA Publications Division, ESA HSR-9, May 1993.

Netherlands: ESA Publications Division, ESA HSR-13, February 1994.

Sebesta, Lorenza. *United States-European Cooperation in Space during the Sixties*. The Netherlands: ESA Publications Division, ESA HSR-14, July 1994.

Sebesta, Lorenza. *United States-European Space Cooperation in the Post-Apollo Programme*. The Netherlands: ESA Publications Division, ESA HSR-15, February 1995.

Russo, Arturo. *The Scientific Programme Between ESRO and ESA: Choosing New Projects (1973-1977)*. The Netherlands: ESA Publications Division, ESA HSR-16, February 1995.

Krige, John and Russo, Arturo. *Europe in Space 1960-1973*. The Netherlands: ESA Publications Division, ESA SP-1172, September 1994.

Russo, Arturo. *Science beyond the Atmosphere: The History of Space and Research in Europe*. "Proceedings of a symposium held in Palermo 5-7 November 1992." The Netherlands: ESA Publications Division, ESA HSR-SPECIAL, July 1993.

De Maria, Michelangelo. *The History of ELDO Part I: 1961-1964*. The Netherlands: ESA Publications Division, ESA HSR-10, September 1993.

Krige, John and Russo, Arturo. *Reflections on Europe in Space*. The Netherlands: ESA Publications Division, ESA HSR-11, January 1994.

Fischer, Peter. *The Origins of the Federal Republic of Germany's Space Policy 1959-1965—European and National Dimensions*. The Netherlands: ESA Publications Division, ESA HSR-12, January 1994.

Russo, Arturo. *ESRO's Telecommunications Programme and the OTS Project (1970-1974)*. The